## STATE OF COLORADO

Bill Ritter, Jr., Governor James B. Martin, Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

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Colorado Department of Public Health and Environment

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March 25, 2009

PWSID# CO-0145690 South Swink Water Company Attention: Noe Norman, R.A. 22981County Road 28 La Junta, CO 81050

Certified Mail Number: 7007 0220 0001 0160 7348

RE: Service of Amendment to Enforcement Order Dated March 16, 2000

Dear Noe Norman:

South Swink Water Company is hereby issued the enclosed amendment to the Enforcement Order that was issued to the South Swink Water Company on March 16, 2000. This order amendment is issued by the Colorado Department of Public Health and Environment's Water Quality Control Division (the "Division") pursuant to the authority given to the Division by §25-1.5-203 of the Colorado Revised Statutes.

Should you desire to discuss this matter with the Division or if you have any questions regarding the order amendment(s), please don't hesitate to contact Jackie Whelan at (303) 692-3617 or by electronic mail at jackie.whelan@state.co.us.

Sincerely,

Kristi-Raye Beaudin, Legal Assistant

Compliance Assurance and Data Management Section

WATER QUALITY CONTROL DIVISION

cc: Otero County Health Department

Compliance Monitor / Drinking Water File

ec: Dave Knope, Engineering Section, CDPHE
Dick Parachini, Watershed Program, CDPHE

Betsy Beaver, Facility Operators Program, CDPHE

Shawn McCaffrey, EPA Region VIII

Jeff Lawerence, Director Consumer Protection Division, CDPHE

Carolyn Schachterle, OPA



# COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT WATER QUALITY CONTROL DIVISION

AMENDMENT TO ENFORCEMENT ORDER NUMBER: DATED MARCH 16, 2000 NUMBER TWO

IN THE MATTER OF: SOUTH SWINK WATER COMPANY
PUBLIC WATER SYSTEM IDENTIFICATION NUMBER: CO0145690
OTERO COUNTY, COLORADO

Pursuant to the authority vested in the Colorado Department of Public Health and Environment (the "Department") by §25-1-109 and §25-1.5-203 of the Colorado Revised Statutes ("C.R.S."), which authority has been delegated to the Department's Water Quality Control Division (the "Division"), the Division hereby makes the following findings and issues the following Enforcement Order Amendment:

#### **GENERAL FINDINGS**

- 1. The Division issued Enforcement Order Dated March 16, 2000, to South Swink Water Company citing violations of the Colorado Primary Drinking Water Regulations for failure to comply with the maximum contaminant levels for Gross Alpha Particle Activity and Combined Radium-226 and Radium-228. The Enforcement Order is attached hereto as Exhibit A and is incorporated herein by reference.
- 2. After re-evaluating the difficulties associated with the complying with the radionuclides maximum contaminant levels and in coordination with the Division's CORADS initiative, the Division is amending Enforcement Order number Dated March 16, 2000, as follows:

### <u>AMENDMENT NUMBER TWO</u>

- 3. Effective as of the issued date of this Amendment, Enforcement Order Dated March 16, 2000, is therefore amended to revise the Enforcement Order as follows:
  - A. Paragraph 6, Section "Finding of Fact" is superseded and replaced with the following new paragraphs 3(A)(i)-(ii):
    - i. A review of the radiological monitoring data from January 1, 1994, to present provided to the Department by the System, establishes that the running annual

average of samples obtained by the System as required exceeds the maximum contaminant level (MCL) of 15 picocuries per liter (pCi/L) for Gross Alpha Particle Activity or has not met the requirements to return to compliance with the MCL.

Sampling	Compliance	Gross Alpha Partic	Compliance	Compliance	Annual
Point	Period/Date/Result	Period/Date/Result	Period/Date/Result	Period/Date/Result	Average
Distribution	04/15/1994				
System	20				20
Distribution	05/06/1997				
System	30				30
005	08/24/1999 High Solids				No Results
005	Q1 2000 02/07/00 39	Q2 2000 04/17/00 15	Q32000 07/10/00 31	Q4 2000 10/23/00 26	28
005	Q2 2000 04/17/00 15	Q32000 07/10/00 31	Q4 2000 10/23/00 26	Q1 2001 01/15/01 9.3	20
005	Q32000 07/10/00 31	Q4 2000 10/23/00 26	Q1 2001 01/15/01 9.3	9.5 Q2 2001 04/16/01 15	24
005	Q4 2000 10/23/00 26	Q1 2001 01/15/01 9.3	Q2 2001 04/16/01 15	Q3 2001 07/16/01 14	16
005	Q1 2001 01/15/01 9.3	Q2 2001 04/16/01 15	Q3 2001 07/16/01 14	Q4 2001 10/22/01 19	14
005	Q2 2001 04/16/01 15	Q3 2001 07/16/01 14	Q4 2001 10/22/01 19	Q1 2002 01/14/02 14	16
005	ANNUAL 2003 10/06/03 19				19
005	ANNUAL 2004 10/13/04 22.7				23
005	ANNUAL 2005 11/09/05 18				18
005	ANNUAL 2006 10/03/06 16				16
005	ANNUAL 2007 10/17/07 31				31
005	ANNUAL 2008 10/07/08 21				21

ii. A review of the radiological monitoring data from January 1, 1994, to present provided to the Department by the System, establishes that the running annual

average of samples obtained by the System as required exceeds the maximum contaminant level of 5 picocuries per liter (pCi/L) for Combined Radium-226 and Radium-228.

Combined Radium-226 and Radium-228 (in pCi/L)   Sampling   Compliance   Complianc								
Point	Period/Date/Result	Period/Date/Result	Period/Date/Result	Period/Date/Result	Annual			
Distribution	04/15/1994	1 01 10 at Date Teesant	T CHOO! Date/Itesuit	T er tou/174tc/ Nesuit	Average			
System	6.6 (radium-226	·			>6.6			
	only)				70.0			
Distribution	05/06/1997			<del>-</del>				
System	6.9 (radium-226				>6.9			
	only)							
003T	08/24/1999	<u></u>		<del></del>				
	13	:			13			
003T	Q1 2000	Q2 2000	Q3 2000	Q4 2000				
	02/07/00	04/17/00	07/10/00	10/23/00	12			
	12.7	10.9	12.9	12.6	12			
003T	Q2 2000	Q3 2000	Q4 2000	Q1 2001				
	04/17/00	07/10/00	10/23/00	01/15/01	12			
	10.9	12.9	12.6	12.7				
003T	Q3 2000	Q4 2000	Q1 2001	Q2 2001				
	07/10/00	10/23/00	01/15/01	04/16/01	12			
	12.9	12.6	12.7	11.7	12			
003T	Q4 2000	Q1 2001	Q2 2001	Q3 2001				
	10/23/00	01/15/01	04/16/01	07/16/01	13			
	12.6	12.7	11.7	13.2	15			
003T	Q1 2001	Q2 2001	Q3 2001	Q4 2001				
	01/15/01	04/16/01	07/16/01	10/22/01	13			
	12.7	11.7	13.2	15.2	13			
003T	Q2 2001	Q3 2001	Q4 2001	Q1 2002				
	04/16/01	07/16/01	10/22/01	01/14/02	13			
	11.7	13.2	15.2	11.3				
003T	ANNUAL 2003		···					
	10/06/03				12			
	11.9				12			
003T	ANNUAL 2004							
	10/13/04				13			
	12.89							
003Т	ANNUAL 2005			· ·				
	11/09/05				12			
	12.3							
003T	ANNUAL 2006	· · · · ·			<u> </u>			
}	10/03/06				16			
	15.8							
003T	ANNUAL 2007		·	<del>                                     </del>				
	10/17/07				13			
	13.1			1				
003T	ANNUAL 2008		<u> </u>					
	10/07/08			1	12			
	12.4							
005	08/24/1999		······································		<del></del> -			
	23				23			

Combined Radium-226 and Radium-228 (in pCi/L)								
Sampling	Compliance	Compliance	Compliance	Compliance	Annual			
Point	Period/Date/Result	Period/Date/Result	Period/Date/Result	Period/Date/Result	Average			
005	Q1 2000	Q2 2000	Q3 2000	Q4 2000	19			
	02/07/00	04/17/00	07/10/00	10/23/00				
	20	18.9	18.5	19.2				
005	Q2 2000	Q3 2000	Q4 2000	Q1 2001	19			
	04/17/00	07/10/00	10/23/00	01/15/01				
	18.9	18.5	19.2	20.1				
005	Q3 2000	Q4 2000	Q1 2001	Q2 2001	19			
	07/10/00	10/23/00	01/15/01	04/16/01				
	18.5	19.2	20.1	18.7				
005	Q4 2000	Q1 2001	Q2 2001	Q3 2001	20			
	10/23/00	01/15/01	04/16/01	07/16/01				
	19.2	20.1	18.7	20				
005	Q1 2001	Q2 2001	Q3 2001	Q4 2001	20			
	01/15/01	04/16/01	07/16/01	10/22/01				
	20.1	18.7	20	20.3				
005	Q2 2001	Q3 2001	Q4 2001	Q1 2002	20			
	04/16/01	07/16/01	10/22/01	01/14/02				
	18.7	20	20.3	19				
005	ANNUAL 2003							
	10/06/03				17			
	16.7				1,			
005	ANNUAL 2004							
	10/13/04				21			
	21.39							
005	ANNUAL 2005							
	11/09/05				14			
	14.3							
005	ANNUAL 2006							
	10/03/06				13			
	12.5				1.7			
005	ANNUAL 2007	·	<del> </del>					
	10/17/07			]	13			
	13				15			
005	ANNUAL 2008			<del>                                     </del>				
	10/07/08				14			
	14.1			1	14			

- B. The compliance schedule specified in paragraph 1, section "Order" is superseded and replaced with the following new paragraph 3(B)(i):
  - i. In order to ensure long-term compliance with the maximum contaminant levels for Gross Alpha Particle Activity and Combined Radium-226 and Radium-228, the South Swink Water Company shall evaluate and upgrade, as needed, the System's water sources and/or treatment process(es) in accordance with the following schedule:
    - a. By April 30, 2009, retain a qualified Professional Engineer (licensed in Colorado and experienced in drinking water systems) to evaluate and

recommend radiological treatment technologies or alternate water sources to the South Swink Water Company to ensure compliance with the maximum contaminant level for Gross Alpha Particle Activity and Combined Radium-226 and Radium-228.

- b. By October 31, 2009, submit for Department review and comment a finalized Preliminary Engineering Report for system improvements to comply with the maximum contaminant levels for Gross Alpha Particle Activity and Combined Radium-226 and Radium-228. If an alternate water source is proposed, submit for Department review and comment a detailed description of the alternate water source along with a copy of the laboratory analyses supporting that the alternate water source is suitable.
- c. The Preliminary Engineering Report submittal package must be developed consistent with the Colorado Drinking Water Preliminary Engineering Report Guidance & Review Checklist Form. (see <a href="http://www.cdphe.state.co.us/wq/opa/pdf/19\_CPERGuideChecklistDW.pdf">http://www.cdphe.state.co.us/wq/opa/pdf/19\_CPERGuideChecklistDW.pdf</a>)
- d. If an alternate water source is proposed, submit for Department review and comment a detailed description of the alternate water source along with a copy of the laboratory analyses supporting that the alternate water source is suitable.
- e. The Preliminary Engineering Report (if applicable) must clearly identify the specific treatment technology the South Swink Water Company will use to ensure compliance with the maximum contaminant levels for Gross Alpha Particle Activity and Combined Radium-226 and Radium-228.
- f. The Preliminary Engineering Report (if applicable) must include a process flow schematic of the distribution system from wellheads to points of use, including flow rates, treatment facilities, storage tanks and all service connections supplied by the wells. Alternative treatment locations for the selected treatment process or processes must be evaluated with a recommended location selection. The process flow schematic information and evaluation must be included to ensure all water from the System is treated.
- g. The Preliminary Engineering Report (if applicable) must include a proposal for management of residuals from the treatment technology selected.
- h. The Preliminary Engineering Report submittal package must include design calculations showing the proposed treatment system is properly sized and chlorine contact times can be met for expected flow rates.

{Please note that, prior to construction, the Department must give final approval to any modifications to the System's water source or treatment

- process. The Department will not perform a detailed review and final approval of any proposed modifications until the final design plans and specifications have been received pursuant to paragraph 3(B)(i)(k) below.}
- i. By February 28, 2010, submit for Department review and comment the final Design Report for the South Swink Water Company System improvements to comply with the maximum contaminant levels for Gross Alpha Particle Activity and Combined Radium-226 and Radium-228.
- j. By August 1, 2010, submit Final Design Plans and Specifications for the System improvements for Department review and approval in accordance with the State of Colorado Design Criteria for Potable Water Systems.
- k. The Final Design Plans and Specifications submittal package must include specifications for treatment equipment and/or chemical additives that come in contact with the water that indicate ANSI standards 60 and 61 are met (NSF certification).
- 1. By October 15, 2011, complete construction/implementation of the Department approved System improvements to ensure long-term compliance with the maximum contaminant levels Gross Alpha Particle Activity and Combined Radium-226 and Radium-228.
- m. By December 1, 2011, submit the Professional Engineer's Certification that the System improvements to comply with the maximum contaminant levels for Gross Alpha Particle Activity and Combined Radium-226 and Radium-228 were constructed/installed as approved by the Department.
- C. The following new paragraphs are incorporated into Enforcement Order Dated March 16, 2000,
  - i. By no later than April 30, 2009, the South Swink Water Company shall complete an evaluation to determine appropriate interim measures to ensure that the System is providing the best possible quality of water available until the System implements improvements to ensure long-term compliance with the radiological maximum contaminant levels. The South Swink Water Company shall submit a written report of the results of this evaluation to the Division for review and comment. Implementation of the interim measures identified by the South Swink Water Company shall become a condition of this Enforcement Order unless notified by the Division, in writing, that alternate or additional interim measures are appropriate. If the Division imposes alternate or additional interim measures, they shall also become a condition of this Enforcement Order.
  - ii. By no later than March 31, 2009, and every three (3) months thereafter, the South Swink Water Company shall issue a public notice in accordance with 5 CCR 1003-1, Article 9.2 for each radiological maximum contaminant level violation identified

in this Enforcement Order until the South Swink Water Company has effectively addressed and returned to compliance with the radiological maximum contaminant levels outlined in 5 CCR 1003-1, §2.6, Table 2-7. Within ten (10) calendar days of completion of each required public notification, the South Swink Water Company shall submit to the Department, along with the mandatory Public Notification certification of delivery, a representative copy of notices distributed, published, posted, and/or made available to the persons served by the system and/or to the media. (Attached are copies of procedures and forms to assist you with the public notification requirements.)

- iii. The South Swink Water Company shall submit "System Improvement Project Progress Reports" to the Division every ninety (90) calendar days. The first report shall be submitted to the Division by March 31, 2009. At a minimum, each report shall clearly indicate the status of the system improvement project at the time the report is filed and outline activities to be undertaken within the next ninety (90) calendar days. Each report shall also detail any public notification provided during that period. These reports shall be required until the System has effectively addressed and returned to compliance with the radiological maximum contaminant levels outlined in 5 CCR 1003-1, §2.6, Table 2-7.
- iv. All documents submitted under this Order Amendment shall use the same titles as stated in the Order Amendment, and shall reference both the number of the Order, Amendment number, and the paragraph number pursuant to which the document is required.
- D. For all documents, plans, records, reports, and replies required to be submitted by the Order, South Swink Water Company shall submit an original and one copy (electronic is preferred) to the Division at the following address:

Email: jackie.whelan@state.co.us

Colorado Department of Public Health and Environment
Water Quality Control Division / WQCD-WQP-B2
Compliance Assurance and Data Management Section / Enforcement Team
Attention: Jackie Whelan
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

(For any facsimile transmittals, please include a cover sheet addressed to Ms. Whelan.)

#### SCOPE OF AMENDMENT NUMBER TWO

The scope of this Amendment Number Two to Enforcement Order Dated March 16, 2000, is limited to the revisions outlined above. All other terms and conditions of the Enforcement Order shall remain unchanged and in effect.

Issued at Denver, Colorado, this day of March, 2009.

FOR THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Korem Gersina Lori M. Gerzina, Section Manager

Compliance Assurance and Data Management Section

Water Quality Control Division